4.5.2 ENVIRONMENTAL CONSEQUENCES

As seen in Figures 4.5.1–1 through 4.5.1–16, minority populations and low-income populations reside within 80 km (50 mi) of each of the DOE sites. The density and distribution of these populations vary from site to site with SRS and LANL having relatively large low-income populations and minority populations and NTS with relatively small low-income populations and minority populations within an 80-km (50-mi) radius of the site. Tables 4.5.1–1 through 4.5.1–8 provide demographic statistics for the ROIs used in the socioeconomic analysis.

For environmental justice impacts to occur, there must be high and adverse human health or environmental impacts that disproportionately affect minority populations or low-income populations. The public health and safety analysis shows that air emissions and hazardous chemical and radiological releases from normal operations for all storage and disposition alternatives would be within regulatory limits and that no latent cancer fatalities would result.

The public health and safety analyses also indicate that radiological releases from accidents would not result in significant adverse human health or environmental impacts. Therefore, such accidents would not have disproportionately high and adverse impacts on minority or low-income populations. For the Preferred Alternative, for accidents associated with existing reactors using MOX fuel, the maximum risk (which includes accident probability) of latent cancer fatalities to the public within 80 km (50 mi) would be 0.10 for the 11-year Pu disposition campaign. It is unlikely that there would be disproportionately high and adverse impacts to minority populations or low-income populations surrounding the existing reactors.

The Preferred Alternative would potentially combine different technologies and facilities at a number of sites. As discussed in Section 4.6, there would be no high or adverse impacts from routine operations or accidents, for such a combination of activities, that would disproportionately affect minority or low-income nonworker populations.

The environmental justice analysis also takes into account potential impacts to subsistence populations. However, DOE is unaware of any identified subsistence populations residing on or near any of the alternative sites.

The Department also notes that because none of the alternatives would lead to radiological releases to water that exceed Federal and State regulations, there would be no incremental impacts to fish or other edible aquatic life in the areas surrounding the alternative sites. All chemical releases would be regulated by NPDES permits and would be in compliance with Federal and State regulations. Furthermore, this PEIS evaluates doses to the surrounding population through air and liquid exposures for all alternatives, including No Action.

The analyses indicates that socioeconomic changes resulting from implementing any of the proposed alternatives would not lead to environmental justice impacts. Most alternatives would provide economic benefits through generating additional employment and income in the affected regions. At some sites there would be increased traffic congestion during facility construction or modification, however this impact would be temporary and would not disproportionately affect minority or low income communities. [Text deleted.] Regional income and employment would never decrease by more than one percent during phaseout, and at INEL, LANL, and Pantex, phaseout would have virtually no impact on either site or regional employment levels.

Transportation accidents are random occurrences that could potentially affect the population around the accident site. However, the random nature of these accidents precludes any disproportionate impact to minority or low income populations.